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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR		ATTORNEY DOCKET NO.
09/284,615	06/25/99	TERSKIKH	A	4-21101/A/PC

001095
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HM22/0619

EXAMINER	
UNGAR, S	
ART UNIT	**PAPER NUMBER**
1642	6

DATE MAILED: 06/19/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.	Applicant
09/284,615	Terskikh et al
Examiner	**Group Art Unit**
Ungar	1642

☒ Responsive to communication(s) filed on *Jun 25, 1999*.

☐ This action is **FINAL.**

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire *one* month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) *1-33* is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☐ Claim(s) _____ is/are rejected.

☐ Claim(s) _____ is/are objected to.

☒ Claims *1-33* are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐approved ☐disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____.

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

1. Claims 1-33 are pending in the application and are currently under prosecution.

Please Note: In an effort to enhance communication with our customers and reduce processing time, Group 1640 is running a Fax Response Pilot for Written Restriction Requirements. A dedicated Fax machine is in place to receive your responses. The Fax number is 703-305-3704. A Fax cover sheet is attached to this Office Action for your convenience. We encourage your participation in this Pilot program. If you have any questions or suggestions please contact Donald E. Adams, Ph.D., Supervisory Patent Examiner at Paula Hutzell at 703-308-0570. Thank you in advance for allowing us to enhance our customer service. Please limit the use of this dedicated Fax number to responses to Written Restrictions.

2. This application contains the following inventions or groups of inventions which are not so linked as to form a single inventive concept under PCT Rule 13:

Group I, claims 1-7, 11, 12, 33 drawn to an oligomer comprising at least two units wherein each unit comprises at least two units comprising an oligomerizing domain and a domain capable of binding to an acceptor.

Group II, claims 1 and 8 are drawn to an oligomer wherein some or all units contain a further functional domain attached at the C terminal.

Group III, claim 10 is drawn to a method of using the pentamerization domain of Cartilage Oligomeric Matrix Protein for pentamerization of low molecular weight compounds that are not part of the cartilage Oligomeric Matrix Protein.

Group IV, claim 13 is drawn to a single unit comprising a peptidic domain capable of oligomerizing.

Group V, claims 1 and 14 are drawn to an oligomer wherein the oligomer is useful

for the identification and/or marking of acceptors.

Group VI, claims 1 and 15-17 are drawn to an oligomer wherein the oligomer can bind to eukaryotic cells, bacteria or viruses.

Group VII, claims 1 and 18 are drawn to an oligomer wherein the oligomer can inhibit protein-protein interactions.

Group VIII, claims 1 and 19 are drawn to an oligomer wherein the oligomer is a chelating agent.

Group IX, claims 1 and 20 are drawn to an oligomer wherein the oligomer is a crosslinking agent.

Group X, claims 1 and 21 are drawn to an oligomer wherein the oligomer is used in the construction of libraries.

Group XI, claims 1 and 22 are drawn to an oligomer wherein the oligomer induces apoptosis.

Group XII, claims 1 and 23 are drawn to an oligomer wherein the oligomer is capable of inhibiting intracellular transcription factor binding or gene regulating molecules.

Group XIII, claims 1 and 23 are drawn to an oligomer capable of inhibiting enzymatic activities.

Group XIV, claims 1 and 24 are drawn to an oligomer wherein the oligomer inhibits tumor metastatization..

Group XV, claims 1 and 25 are drawn to an oligomer wherein the oligomer is used in an enzyme immunoassay.

Group XVI, claims 1 and 26 are drawn to an oligomer wherein the oligomer is used in a radioimmunoassay.

Group XVII, claim 27 is drawn to a method of making a single unit.

Group XVIII, claims 28 is drawn to an expression vector for the synthesis of a unit.

Group XIX, claim 29 is drawn to a microbiological host comprising an expression vector.

Group XX, claim 31 is drawn to a method of making an oligomer.

Group XXI, claims 1 and 32 are drawn to an oligomer with epitopes used for vaccine development.

3. The inventions are distinct, each from the other because of the following reasons:

A national stage application shall relate to one invention only or to a group of inventions so linked as to form a single general inventive concept. Unity of invention is fulfilled only when there is a technical relationship among the inventions involving one or more of the same or corresponding special technical features which define a contribution over the prior art. If there is no special technical feature, if multiple products, processes of manufacture or uses are claimed, the first invention of the category first mentioned in the claims of the application will be considered as the main invention in the claims, see PCT article 17(3) (a) and 1.476 (c), 37 C.F.R. 1.475(d).

The inventions listed as Groups I-XXI do not relate to a single inventive concept because they lack the same or corresponding special technical features for the following reasons:

The technical feature linking Groups I-XXI appears to be that they all relate to an oligomer which comprises a peptide domain capable of oligomerizing and a domain capable of binding to an acceptor wherein the oligomerizing domain is not an antibody. However, Efimov (FEBS Letters, 1994, 341:54-58, IDS item AO) specifically teaches the

use of the oligomerization domain of Cartilage Oligomeric Matrix Protein for the pentamerisation of an additional methionine or additional glutathiones. Therefore the technical feature linking the inventions of Groups I-XXII does not constitute a special technical feature as it does not define a contribution over the prior art.

In view of the above, Group I is considered the main invention. After that, all other products and methods have been broken out as separate groups (see 37 CAR 1.475(d).).

Group I forms a single general inventive concept.

Groups II, IV-XVI, XVIII, XIX, XXI as disclosed are biologically and chemically distinct, unrelated in function, made by and used in different methods and are therefore distinct inventions.

Groups III, XVII, XX are materially distinct methods which differ at least in objectives, method steps, reagents and/or dosages and/or schedules used, response variables, and criteria for success.

4. Because these inventions are distinct for the reasons given above restriction for examination purposes as indicated is proper.

5. Group I contains claims directed to more than one species of the generic invention.

Claim 1 is generic to a plurality of disclosed species comprising acceptors with different structures and functions wherein the acceptors are (a) antibody (claim 40, (b) receptor (claim 4).

6. Group I contains claims directed to more than one species of the generic invention.

Claim 1 is generic to a plurality of disclosed species comprising oligomers that either bind to the same or distinct acceptors with different structures and functions, wherein the acceptors are (a) the same (claim1), (b) distinct (claim 12).

11. Group VI contains claims directed to more than one species of the generic invention.

Claim 1 is generic to a plurality of disclosed species comprising oligomers that either bind to cells with different structures and functions wherein the cells are (a) eukaryotic (claims 15-17), (b) bacteria (claims 15-16), © viruses (claims 15-16).

7. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. § 103 of the other invention.

8. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 C.F.R. § 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a diligently-filed petition under 37 C.F.R. § 1.48(b) and by the fee required under 37 C.F.R. § 1.17(h).

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. § 103, the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 C.F.R. § 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of potential 35 U.S.C. § 102(f) or (g) prior art under 35 U.S.C.

§ 103.

10. Applicant is advised that the response to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan Ungar, Ph.D. whose telephone number is (703) 308-305-2181.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Caputa, can be reached at (703) 308-3995. The fax phone number for this Art Unit is (703) 308-4242.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0196.

Effective, February 7, 1998, the Group and/or Art Unit location of your application in the PTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Group Art Unit 1642.

Susan Ungar
Primary Patent Examiner
June 16, 2000